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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/505,472	08/20/2004	Stephen D. Gilder	5-41-56(16B)(4006-04202)	1706
30652	7590	04/04/2007		
CONLEY ROSE, P.C. 5700 GRANITE PARKWAY, SUITE 330 PLANO, TX 75024			EXAMINER COONEY, JOHN M	
			ART UNIT	PAPER NUMBER
			1711	
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		04/04/2007	PAPER	

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/505,472

Applicant(s)

GILDER ET AL.

Examiner

John m. Cooney

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 28 December 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,3-28 and 30-43 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3-28 and 30-43 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 August 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

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Applicant's arguments filed 12-28-06 have been fully considered but they are not persuasive.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 22-28, and 41 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Applicants' newly added range of mean particle size values for their melamine is a limitation which lacks support in applicants' originally filed supporting disclosure. This is a new matter rejection.

Applicants do not demonstrate support in the originally provided supporting disclosure for the invention now claimed, and the support is not readily evident and/or seen.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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Claim 42 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 42 refers to claim 1 as being a process, but claim 1 is a product. Accordingly, claim 42 is confusing as to intent. For addressing claim 42 in regards to prior art, it has been treated as a product.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 3-28, 41, and 42 are rejected under 35 U.S.C. 102(b) as being anticipated by Grace et al.(4,892,893).

Grace et al. disclose methods for preparing polyurethane foams by mixing and reacting polyol, isocyanate, water, melamine, and other fire retardants under mixing conditions reading on those claimed (see column 2 line 22 - column 7 line 48 and the examples, as well as, the entire document). Densities as claimed are disclosed, and, owing to the physical material contents, the claimed flame test, IFD and air flow values are seen to be inherent to the teachings of Grace et al.

It is held, in the instant case, that the teachings of Grace et al. provide for contents of melamine and particle size values with specificity as to providing for the

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respective values and their effects on resultant compositions such that anticipation of these elements of the claims by Grace et al. is evident.

Claims 1, 3-28, 41, and 42 are rejected under 35 U.S.C. 102(b) as being anticipated by Grace et al.(4,849,459).

Grace et al. disclose methods for preparing polyurethane foams by mixing and reacting polyol, isocyanate, water, melamine, and other fire retardants under mixing conditions reading on those claimed (see the entire document). Densities as claimed are disclosed, and, owing to the physical material contents, the claimed flame test, IFD, and air flow values are seen to be inherent to the teachings of Grace et al.

It is held, in the instant case, that the teachings of Grace et al. provide for contents of melamine and particle size values with specificity as to providing for the respective values and their effects on resultant compositions such that anticipation of these elements of the claims by Grace et al. is evident.

Claims 1, 3-28, 41, and 42 are rejected under 35 U.S.C. 102(b) as being anticipated by Ricciardi et al.(4,757,093).

Ricciardi et al. disclose methods for preparing polyurethane foams by mixing and reacting polyol, isocyanate, water, melamine, and other fire retardants under mixing conditions reading on those claimed (see column 3 line 9 - column 5 line 65 and the examples, as well as, the entire document). Densities as claimed are disclosed, and,

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owing to the physical material contents, the claimed flame test, IFD, and air flow values are seen to be inherent to the teachings of Ricciardi et al.

It is held, in the instant case, that the teachings of Ricciardi et al. provide for contents of melamine and particle size values with specificity as to providing for the respective values and their effects on resultant compositions such that anticipation of these elements of the claims by Ricciardi et al. is evident.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 30-40, and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Grace et al.('893) as applied to claims 1-35 above, and further in view of Eiben et al.(5,789,457) and Webster et al.(3,862,921).

Grace et al. differs from applicants' claims in that it does not particularly require filtering of its mixtures before of after passing through the mixing head. However, Eiben et al.(see abstract and claims) and Webster et al.(see column 6 lines 8-15) disclose

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employment of filter screens in polyurethane polymer processing operations for their filtration and other material enhancing effects. Accordingly, it would have been obvious for one having ordinary skill in the art to have employed filters as disclosed by Eiben et al. and Webster et al. before and after ejection of the materials from the mixing head in the preparations of Grace et al. for the purpose of imparting their known filtration and materials enhancing effects in order to arrive at the products and processes of applicants' claims with the expectation of success in the absence of a showing of new or unexpected results. Further, it is held that cleaning/scraping of filters, as set forth by applicants' new claim 43, for the purpose of maintaining their filtering efficiency and effectiveness, and to prevent blocking is a processing feature which would have been well within the skill of the ordinary practitioner in the art.

As for Grace et al.'s removal of polyol filters in its processes (column 7 lines 24-32), it is held that all disclosures of the prior art, including unpreferred or auxiliary embodiments, must be considered in determining obviousness. In re Mills, 176 USPQ; In re Lamberti, 192 USPQ 278; In re Boe, 148 USPQ 507.

Claims 30-40, and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Grace et al.('893) as applied to claims 1-35 above, and further in view of Eiben et al.(5,789,457) and Webster et al.(3,862,921).

Grace et al. differs from applicants' claims in that it does not particularly require filtering of its mixtures before of after passing through the mixing head. However, Eiben

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et al.(see abstract and claims) and Webster et al.(see column 6 lines 8-15) disclose employment of filter screens in polyurethane polymer processing operations for their filtration and other material enhancing effects. Accordingly, it would have been obvious for one having ordinary skill in the art to have employed filters as disclosed by Eiben et al. and Webster et al. before and after ejection of the materials from the mixing head in the preparations of Grace et al. for the purpose of imparting their known filtration and materials enhancing effects in order to arrive at the products and processes of applicants' claims with the expectation of success in the absence of a showing of new or unexpected results. Further, it is held that cleaning/scraping of filters, as set forth by applicants' new claim 43, for the purpose of maintaining their filtering efficiency and effectiveness, and to prevent blocking is a processing feature which would have been well within the skill of the ordinary practitioner in the art.

Claims 30-40, and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ricciardi et al. as applied to claims 1-35 above, and further in view of Eiben et al.(5,789,457) and Webster et al.(3,862,921).

Ricciardi et al. differs from applicants' claims in that it does not particularly require filtering of its mixtures before of after passing through the mixing head. However, Eiben et al.(see abstract and claims) and Webster et al.(see column 6 lines 8-15) disclose employment of filter screens in polyurethane polymer processing



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operations for their filtration and other material enhancing effects. Accordingly, it would have been obvious for one having ordinary skill in the art to have employed filters as disclosed by Eiben et al. and Webster et al. before and after ejection of the materials from the mixing head in the preparations of Ricciardi et al. for the purpose of imparting their known filtration and materials enhancing effects in order to arrive at the products and processes of applicants' claims with the expectation of success in the absence of a showing of new or unexpected results. Further, it is held that cleaning/scraping of filters, as set forth by applicants' new claim 43, for the purpose of maintaining their filtering efficiency and effectiveness, and to prevent blocking is a processing feature which would have been well within the skill of the ordinary practitioner in the art.

Applicants' arguments have been considered. However, rejections are maintained. Applicants have not demonstrated differences in their products based on features of their composition. The cited prior art offers polyurethane foams having exceptional fire retardant effects, and it is maintained that sufficient disclosure in the cited prior art of compositional make-ups meeting those of applicants' claims is evident that examiner's position of inherency is properly maintained. Examiner further maintains particle size permutations of applicants' claims are properly maintained to be disclosed by the prior art which extensively addresses particle size values and effects in their disclosures.

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As to applicants' process limitations, it is held that applicants' do not establish differences from the prior art supported by defined process limitations in their claims which distinguish the claims from the combinations of the cited prior art.

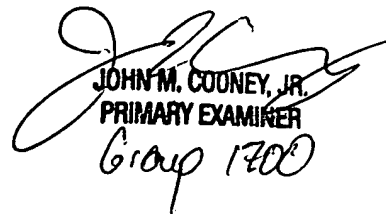
Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Cooney whose telephone number is 571-272-1070. The examiner can normally be reached on M-F from 9 to 6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck, can be reached on 571-272-1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
JOHN M. COONEY, JR.  
PRIMARY EXAMINER  
Group 1700